

LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES



**OFFICE OF FISHERIES
INLAND FISHERIES SECTION**

PART VI –C (ARCHIVES)

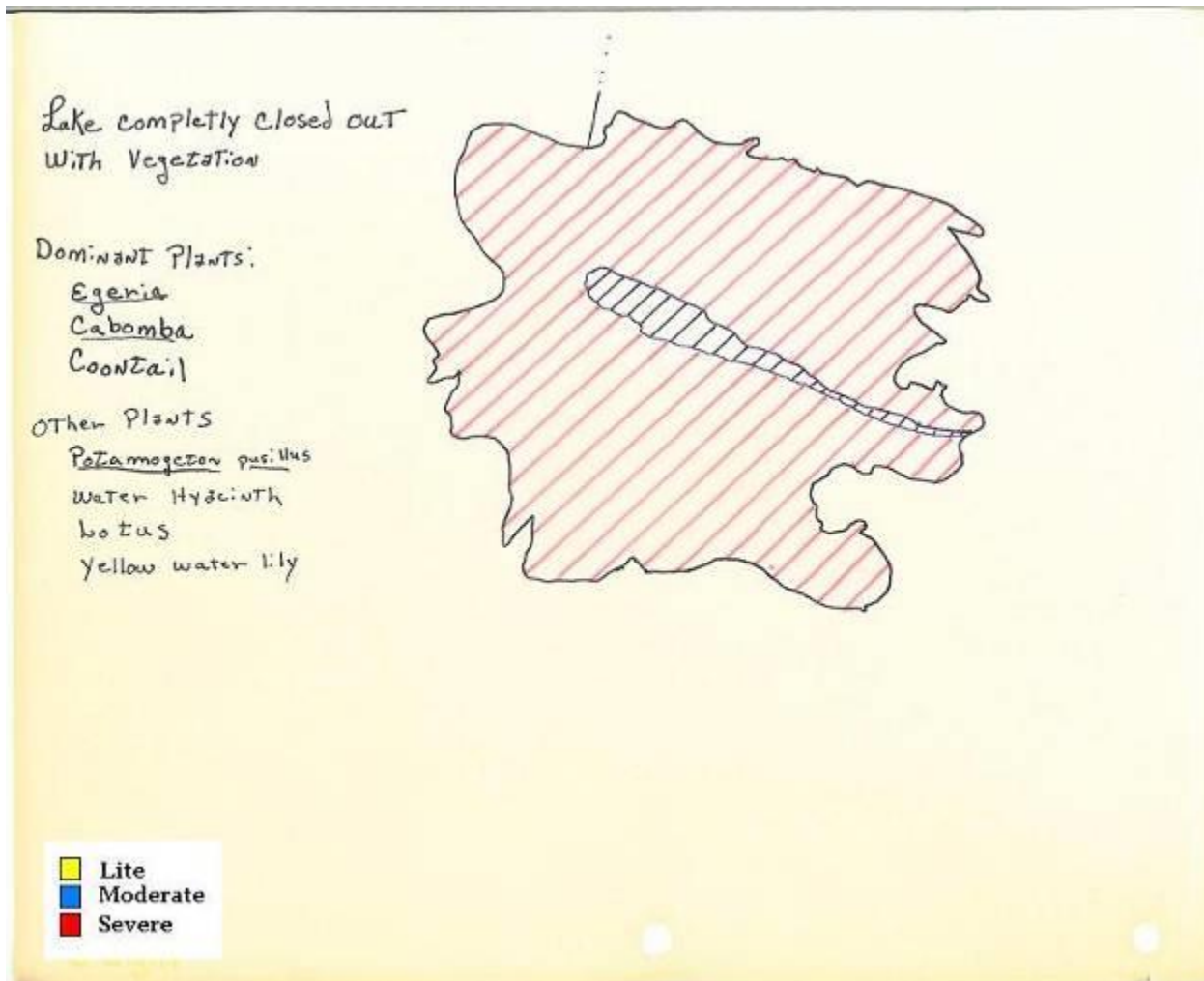
WATERBODY MANAGEMENT PLAN SERIES

BARATARIA BASIN

**AQUATIC VEGETATION TYPE MAPS
AND NARRATIVES**

Barataria Basin Vegetation Type Maps

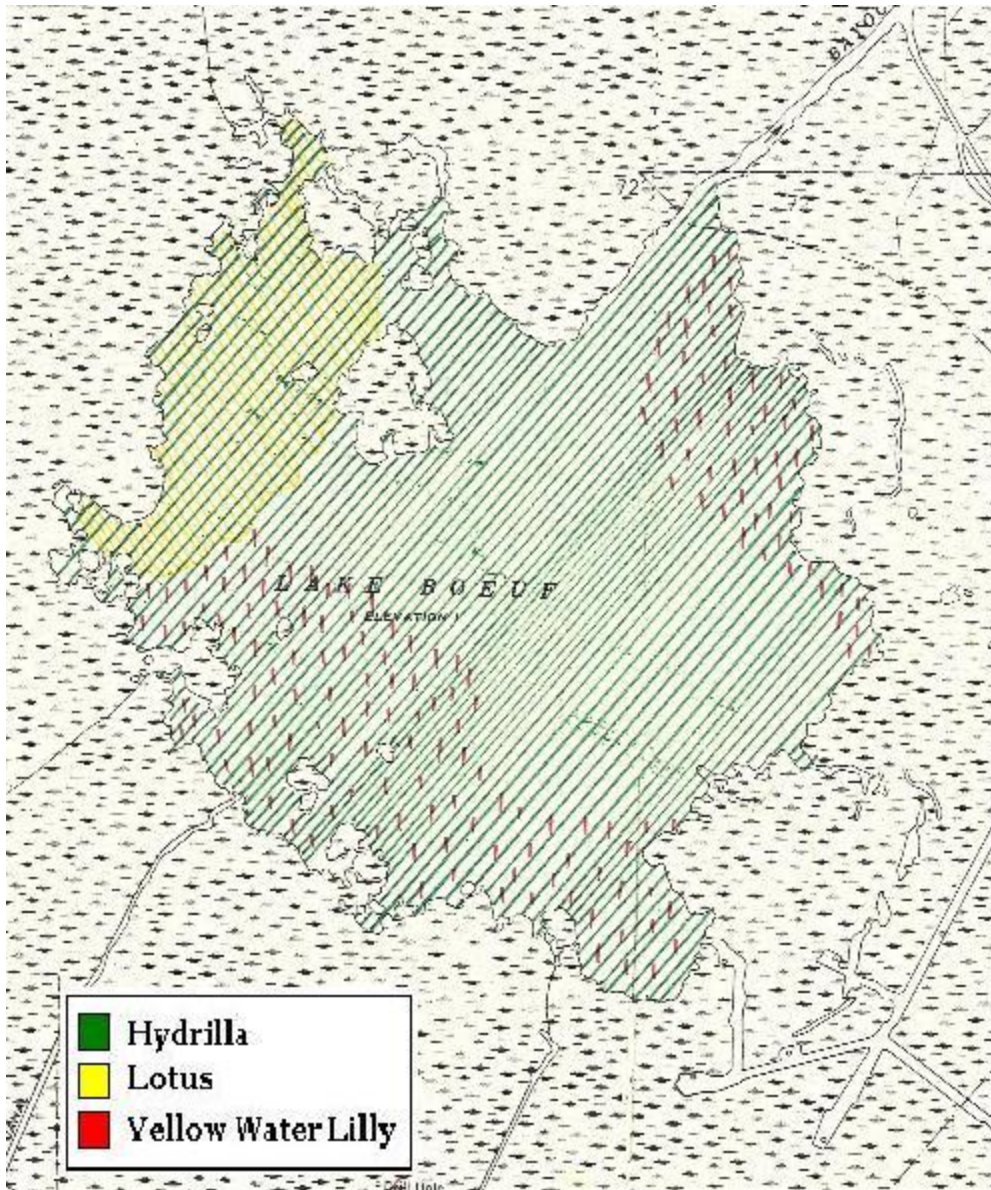
Lake Bouef Type Map 1980



LAKE BOEUF
September 1984

Aquatic vegetation on Lake Boeuf, Lafourche Parish, was inspected on September 18, 1984. Lake Boeuf was again found to be, for the most part, matted over with hydrilla (Hydrilla verticillata). Coverage is 95% (+). Hydrilla was noted to be flowering. Lotus (Nelumbo lutea) overlays the hydrilla in the northwest 20% of the lake, while yellow water lily (Nymphaea mexicana) covers the beds in the northeastern and southern portions.

Other plants observed were water hyacinths (*Eichhornia crassipes*), pickerelweed (Pontederia lanceolata), frog's-bit (Limnobium spongia), coontail (Ceratophyllum demersum) and water-pennywort (Hydrocotyle umbellata).



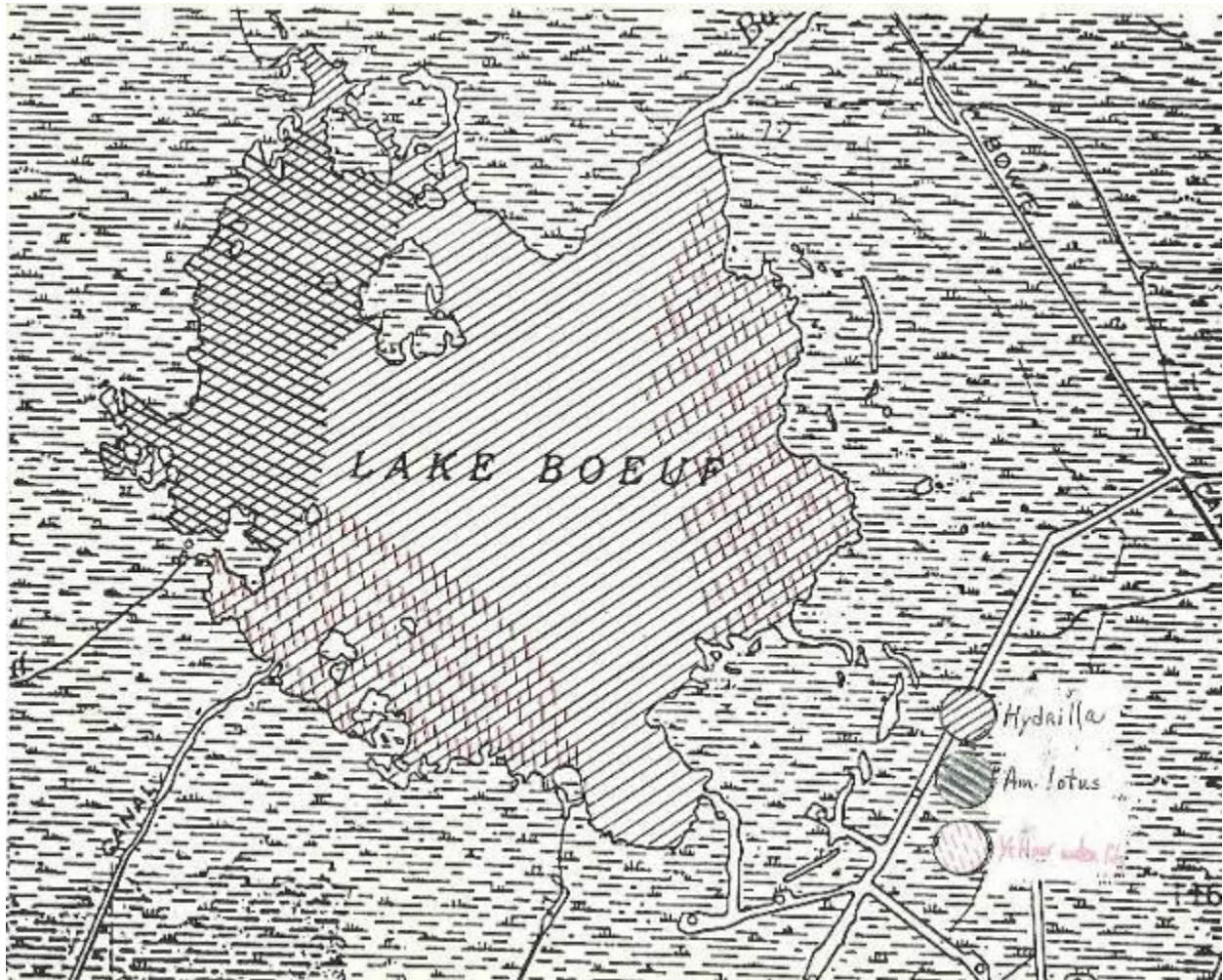
LAKE BOEUF
October 1985

Lake Boeuf, Lafourche Parish, was surveyed for composition and severity of aquatic vegetation on October 3, 1985. At least 95% of the lake was covered by hydrilla (Hydrilla verticillata). Open water areas were found only in boat channels crossing the lake at various locations. These areas ranged from 6.5 to 8.0 feet in depth. A heavy infestation of yellow water lily (Nymphaea mexicana) was interspersed with hydrilla in the northeast portion of the lake.

A moderate to heavy stand of lotus (Nelumbo lutea) overlays the hydrilla beds in the western most portion of the lake. Coverage is approximately 20% and occurs mainly in areas 4.5 to 5.0 feet deep.

Other plants observed were water hyacinths (Eichhornia crassipes), water-pennywort (Hydrocotyle

umbellate), coontail (*Ceratophyllum demersum*), frog's-bit (*Limnobium spongia*), water fern (*Azolla caroliniana*), water lettuce (*Pistia stratiotes*), water-meal (*Wolffia* sp.), and giant duckweed (*Spirodela polyrhiza*).



LAKE BOEUF

September 1986

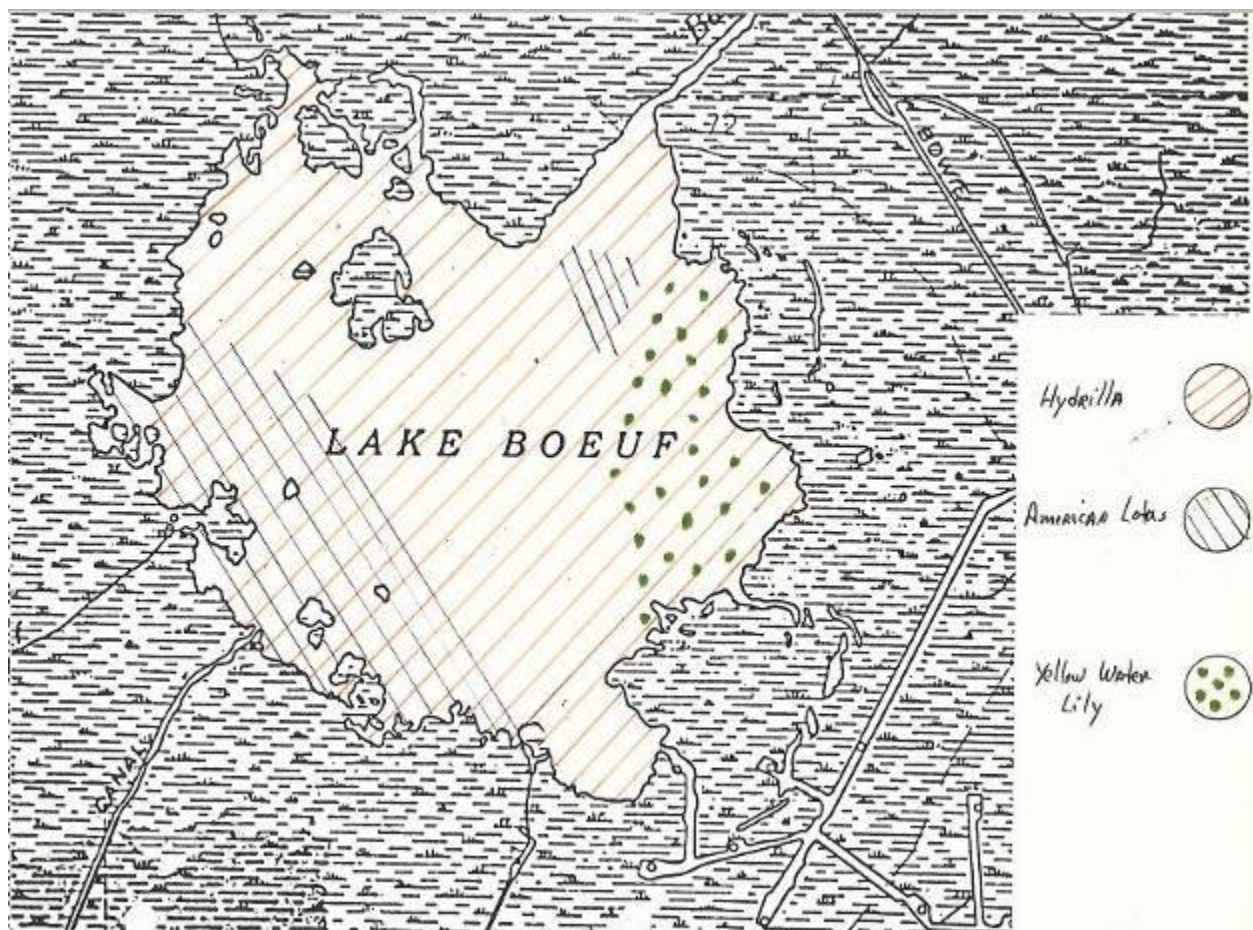
Lake Boeuf, Lafourche Parish, was surveyed on September 30, 1986, to determine the presence and severity of aquatic vegetation. As was reported last year the lake was covered by hydrilla (Hydrilla verticillata). In addition to the boat channels crossing the lake, a small portion of the west-central area of the lake contained open water.

Overlaying the hydrilla beds in the south and southwest portion of the lake is a moderate to heavy stand of lotus (Nelumbo lutea) occurring in water up to 5.0 feet deep. Coverage is approximately 20%. Lotus also occurred in a small portion in the northeast corner of the lake.

Along the westernmost shoreline a moderate to heavy fringe of frog's-bit (Limnobium spongia) was observed out to a depth of 4.0 feet.

A heavy infestation of Yellow water lily (Nymphaea mexicana) occurred in the eastern part of the lake out to a depth of 4.5 feet.

Other plants noted were water hyacinths (Eichhornia crassipes), water-pennywort (Hydrocotyle umbellata), coontail (Ceratophyllum demersum), water fern (Azolla caroliniana), water lettuce (Pistia stratiotes), water meal (Wolffia sp.), and giant duckweed (Spirodela polyrhiza).

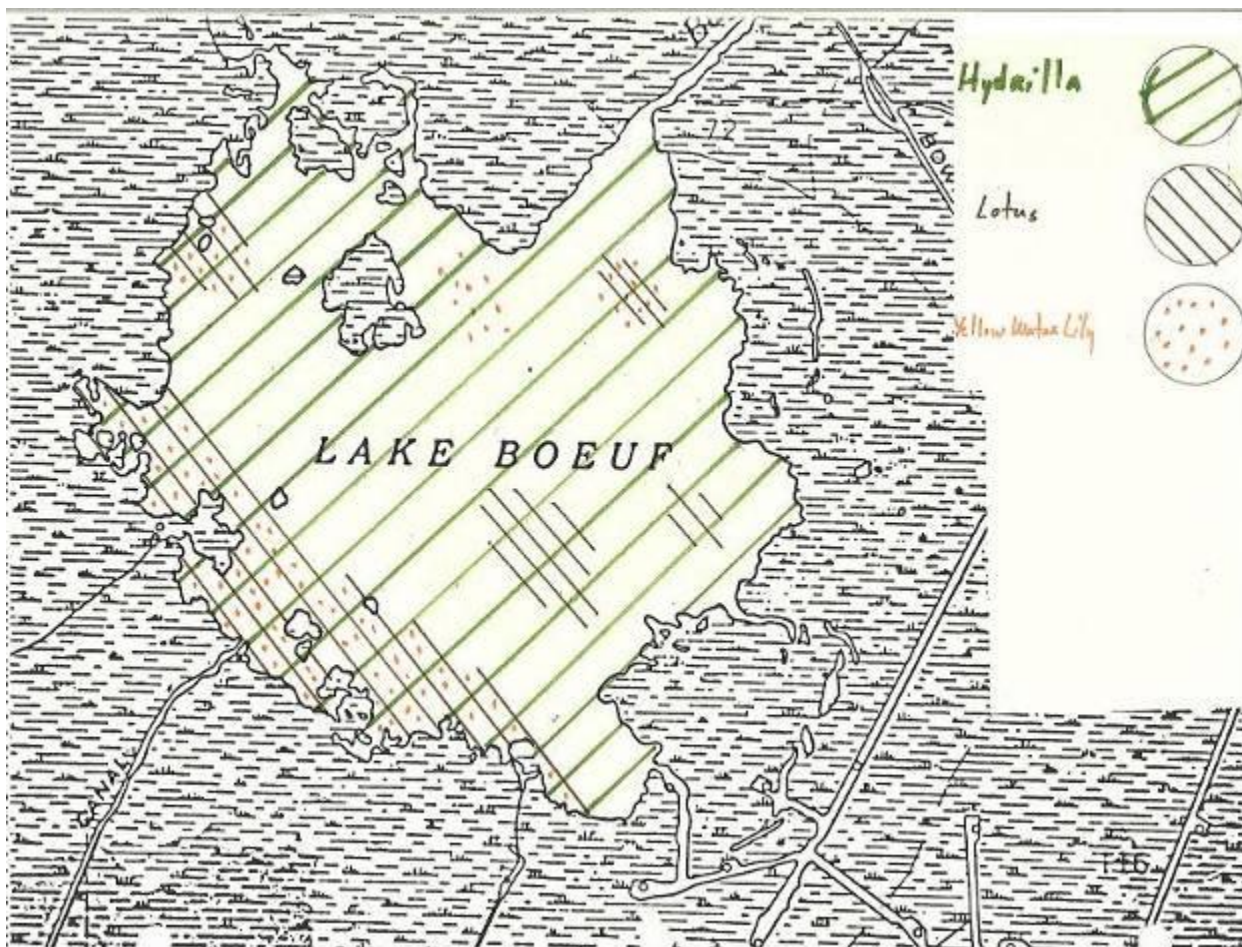


LAKE BOEUF September 1987

On September 30, 1987, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic weed composition and severity of infestation. Hydrilla (Hydrilla verticillata) was again the dominate plant covering most of the lake. Clear water areas include boat channels, small test plots on the east side, and various pool areas scattered throughout the lake. Water depths for these areas were 7.0 feet, 4.5 feet and 4.0 feet respectively.

A moderate to heavy stand of lotus (Nelumbo lutea) mixed with yellow water lily (Nymphaea mexicana) was noted in the south and southwest part of the lake. Plants observed were found in water up to 5.0' in depth. Scattered patches of lotus were also found throughout the lake.

Scattered mats of frog's-bit (Limnobium spongia) water lettuce (Pistia stratiotes), water-pennywort (Hydrocotyle umbellata), alligatorweed (Alternanthera philoxeroides) and coontail (Ceratophyllum demersum).



LAKE BOEUF

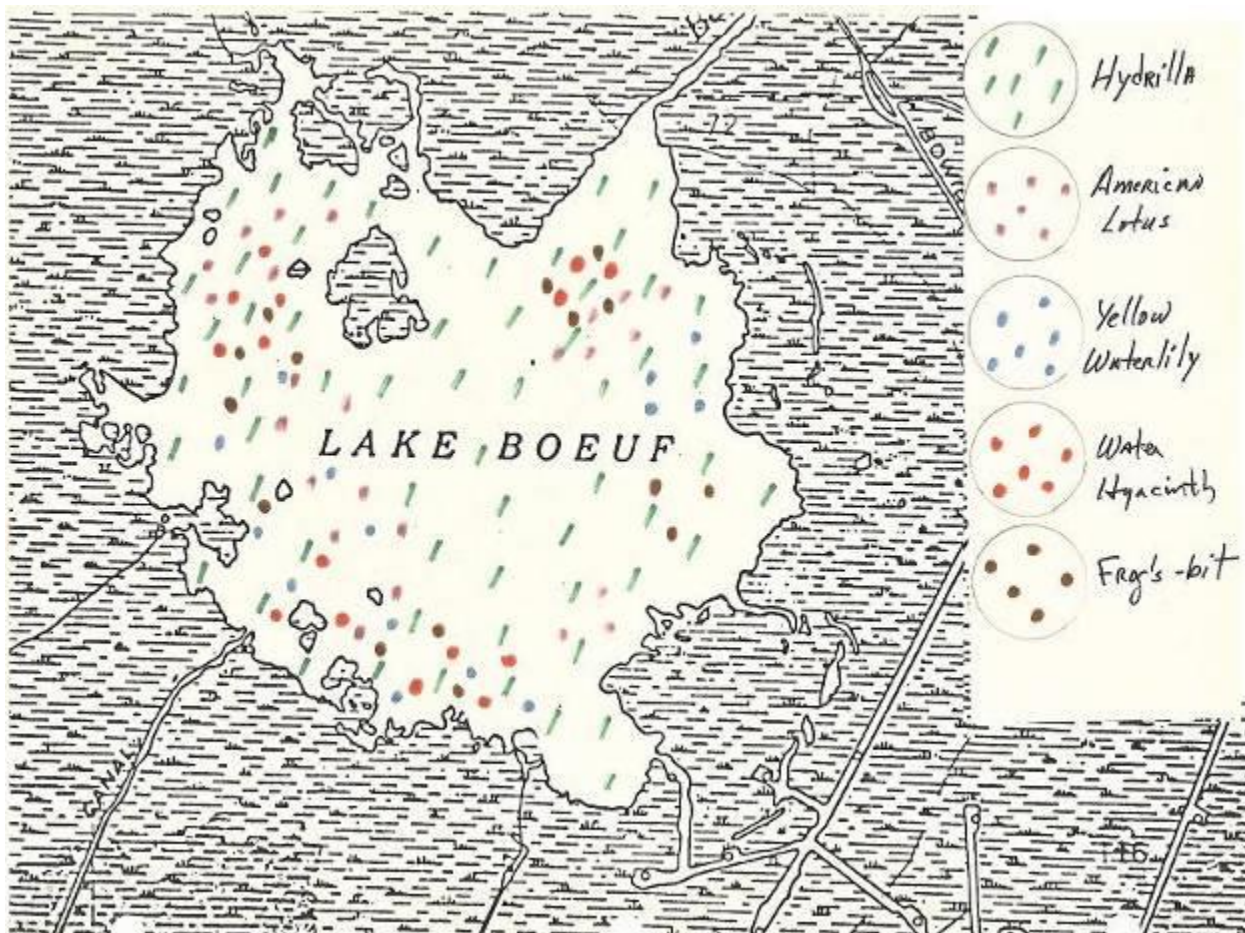
October 1988

On October 6, 1988, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic weed composition and severity of infestation. Although, hydrilla (Hydrilla verticillata) remains the dominate plant species, there was an increase in open water areas compared to previous years. These areas range in depth from 4.5 feet in pond areas to 7.5 feet in the main boat channels.

A mixture of lotus (Nelumbo lutea) and yellow water lily (Nymphaea mexicana) was observed in the south and southwest sections of the lake. A moderate stand of lotus was also present in the northeast quadrant and some scattered plants occurred near the southeast shoreline. Plants observed were found in water up to 5.0' in depth.

Large mats of Water hyacinth (Eichhornia crassipes) and frog's-bit (Limnobium spongia) were present throughout the lake.

Other plants observed included water-pennywort (Hydrocotyle umbellata), coontail (Ceratophyllum demersum), alligatorweed (Alternanthera philoxeroides), fanwort (Cabomba caroliniana), water-fern (Azolla caroliniana), and various species of duckweed.



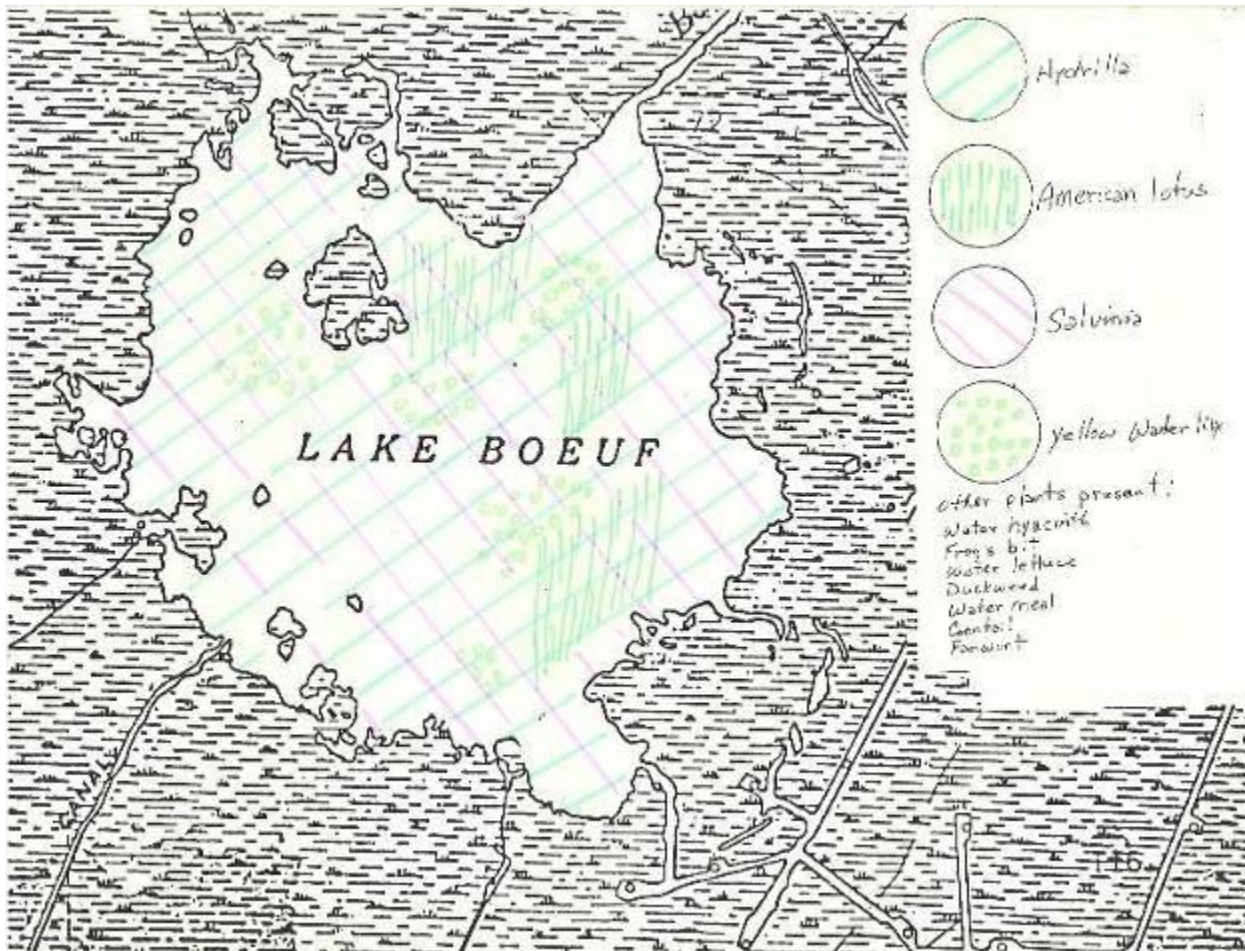
LAKE BOEUF

October 1990

On October 10, 1990, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic weed composition and severity of infestation. Most open water areas were confined to the boat channels. These areas ranged in depth from 5' to 6'.

Hydrilla (Hydrilla verticillata) is the dominate plant species. I was found throughout the lake. American lotus (Nelumbo lutea) was found in dense stands in the entire west portion of the lake, these stands are growing in conjunction with Yellow water lily (Nymphaea mexicana). Salvinia (Salvinia rotundifolia) was also found throughout the entire lake.

Other plants observed included Water hyacinth (Eichhornia crassipes), frogbit (Limnobium spongia), waterlettuce (Pistia stratiotes), duckweed (Lemna minor), watermeal (Wolffia spp.), coontail (Ceratophyllum demersum) and fanwort (Cabomba caroliniana).

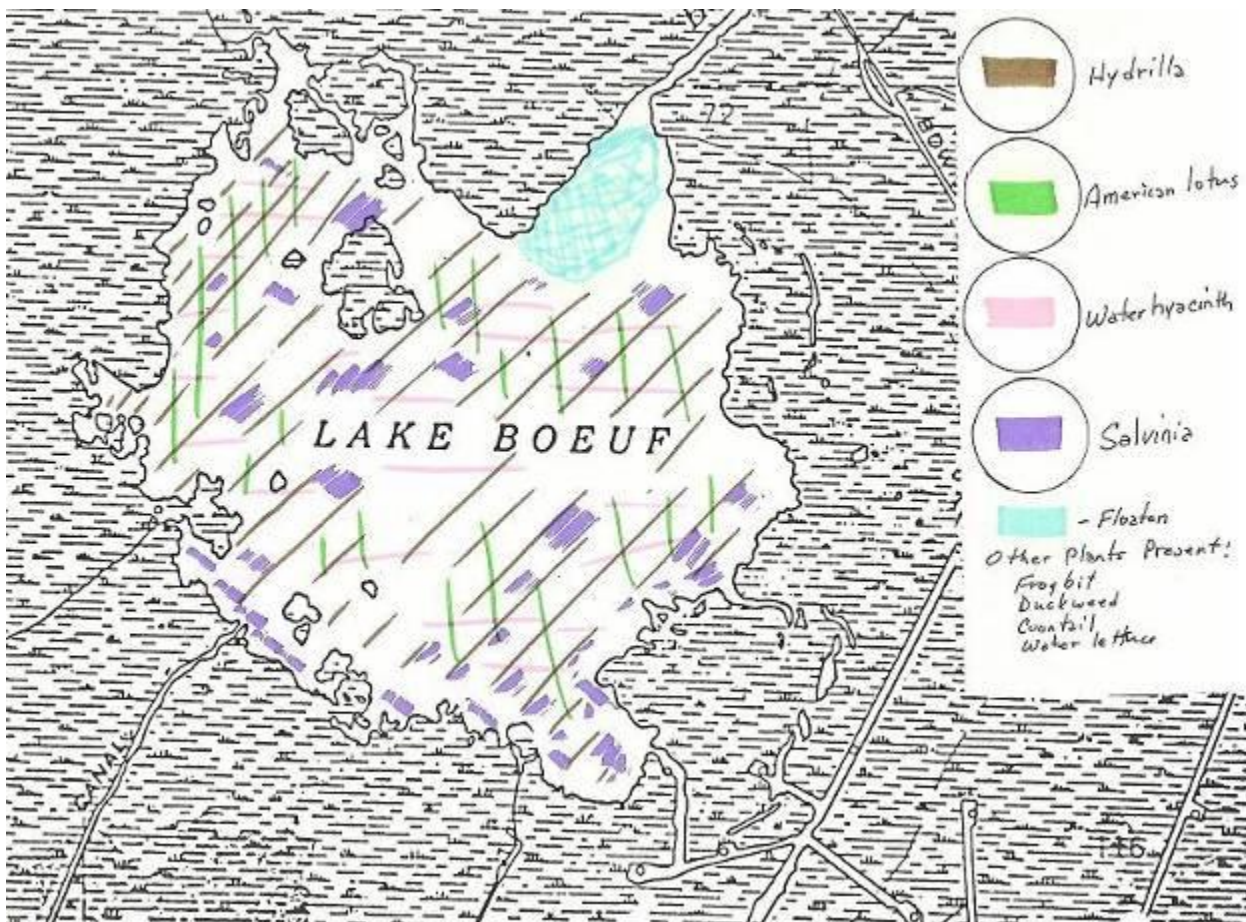


LAKE BOEUF September 1991

On September 25, 1991, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic weed composition and severity of infestation. Hydrilla (Hydrilla verticillata) remains the dominate plant species, found throughout the entire lake. There are some areas of open water which includes the main boat channels (depth 25'), boat lanes (depth 4') and an area in the north part of the lake where a floatant had broken loose (depth 4'). The floatant had moved and is nearly completely blocking the entrance of Bayou Boeuf into the lake.

This year there seems to be more lotus (Nelumbo lutea) and Water hyacinth (Eichhornia crassipes) in the lake. These plants are found throughout the lake in dense stands and mats. Salvinia (Salvinia rotundifolia) was found throughout the lake, also. Especially along the edges of the channels and ponds.

Other plants observed included frogbit (Limnobium spongia), duckweed (Lemna minor), coontail (Ceratophyllum demersum) and waterlettuce (Pistia stratiotes).



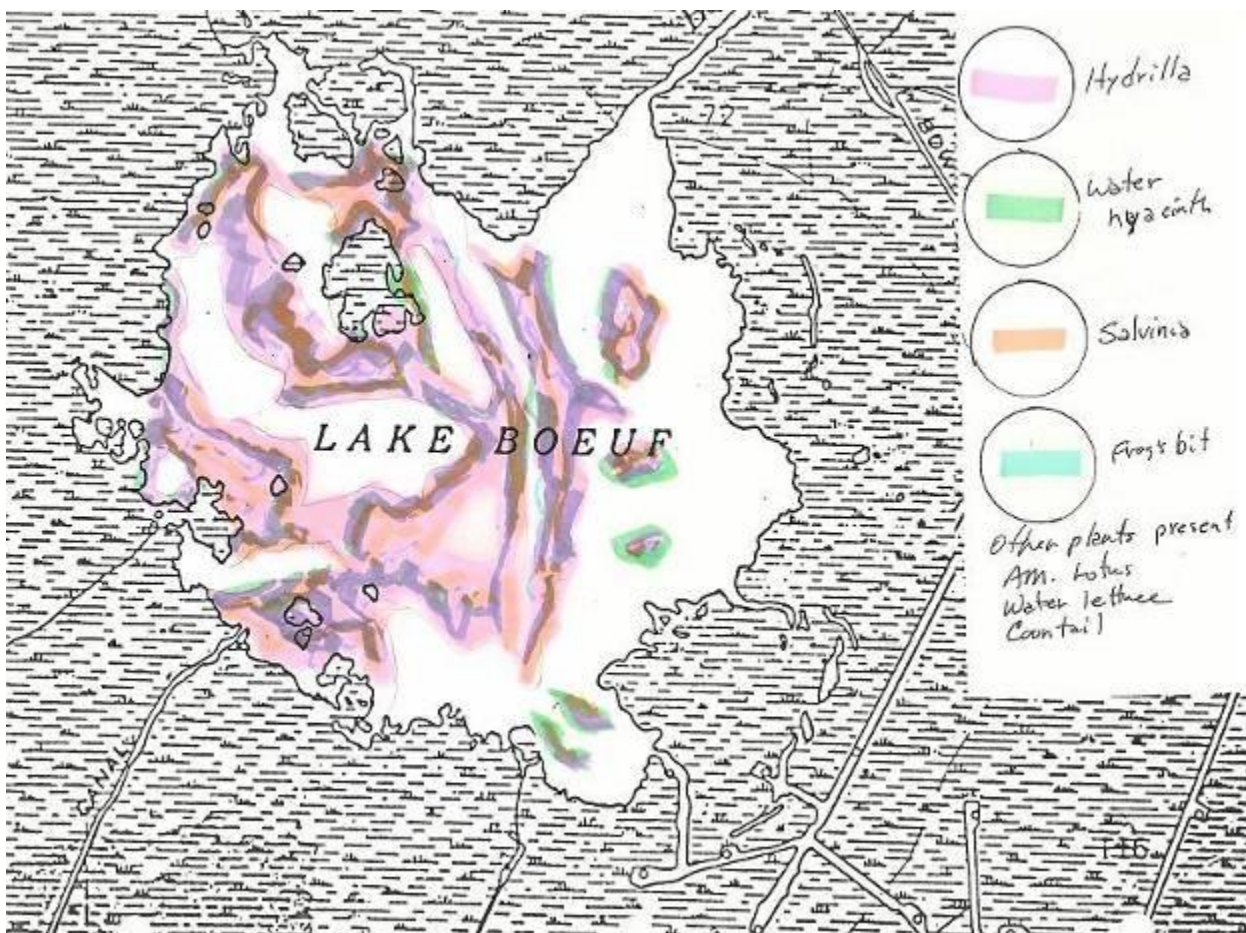
LAKE BOEUF September 1992

On September 23, 1992, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic weed composition and severity of infestation.

Hydrilla (Hydrilla verticillata) remains the dominate submersed plant species present. There is more open water this year as compared to last year but the lake is still 50-65% covered with aquatic vegetation.

Water hyacinths (Eichhornia crassipes) was found throughout the lake intermingled in hydrilla mats as well as along the edges of floatons.

It is evident that the contour of the lake has changed since the Sam Foret Canal is completely inaccessible. This may be due to the movement of floatons in the lake.



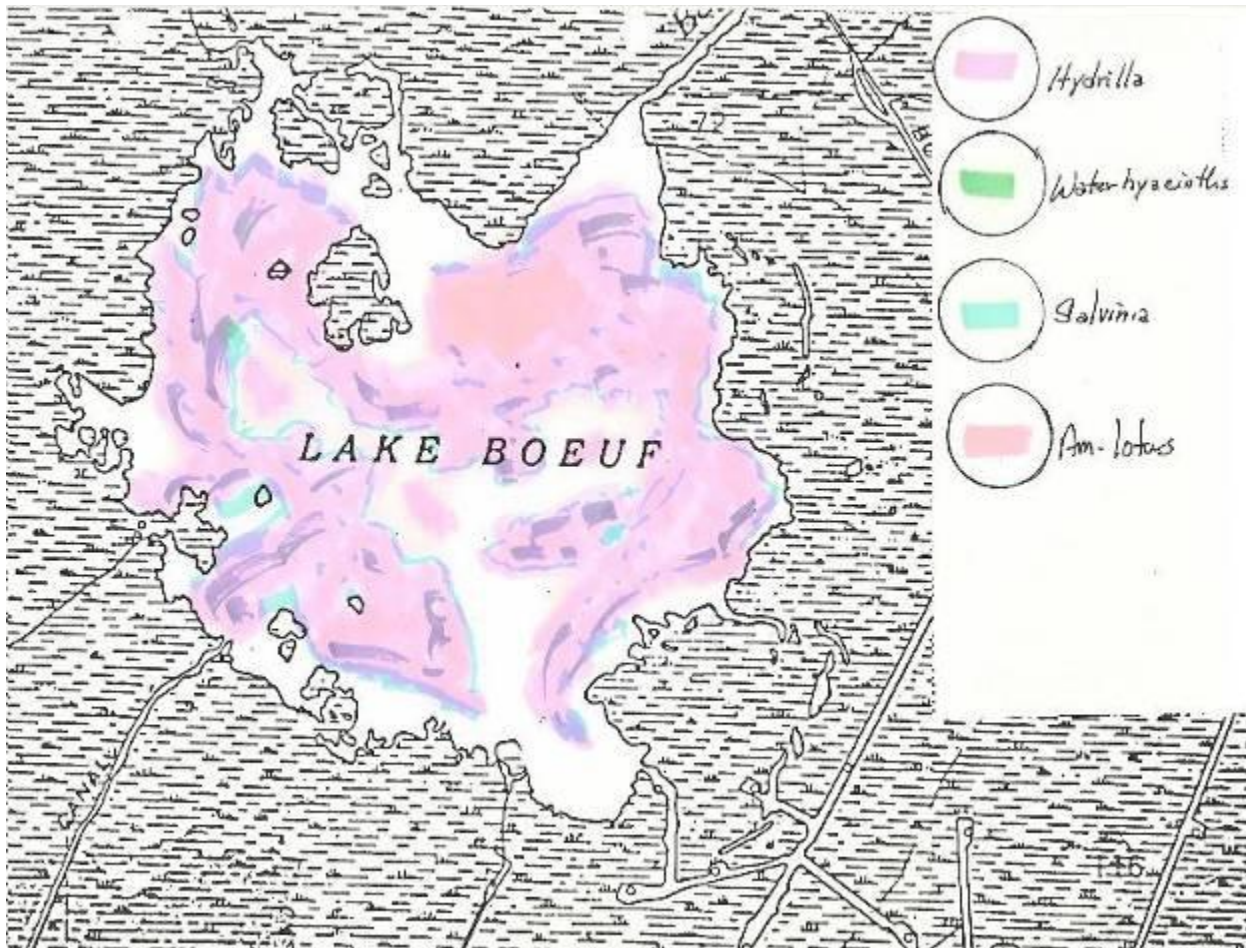
LAKE BOEUF

October 1993

On October 12, 1993, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic weed composition and severity of infestation.

This year, approximately 75% is covered with vegetation. Hydrilla (Hydrilla verticillata) remains the dominate plant species present. Water hyacinth (Eichhornia crassipes) was found throughout the lake, intermingled in hydrilla mats, along channels and at the edges of floatons. There are a few stands of American lotus (Nelumbo lutea). Salvinia (Salvinia rotundifolia) was found throughout the lake along channel edges, pond edges and intermixed in the hydrilla and hyacinth mats.

Other plants observed were: duckweeds (Lemna spp.), frogbit (Limnobium spongia), water lettuce (Pistia stratiotes), Eurasian water milfoil (Myriophyllum spicatum) and coontail (Ceratophyllum demersum).



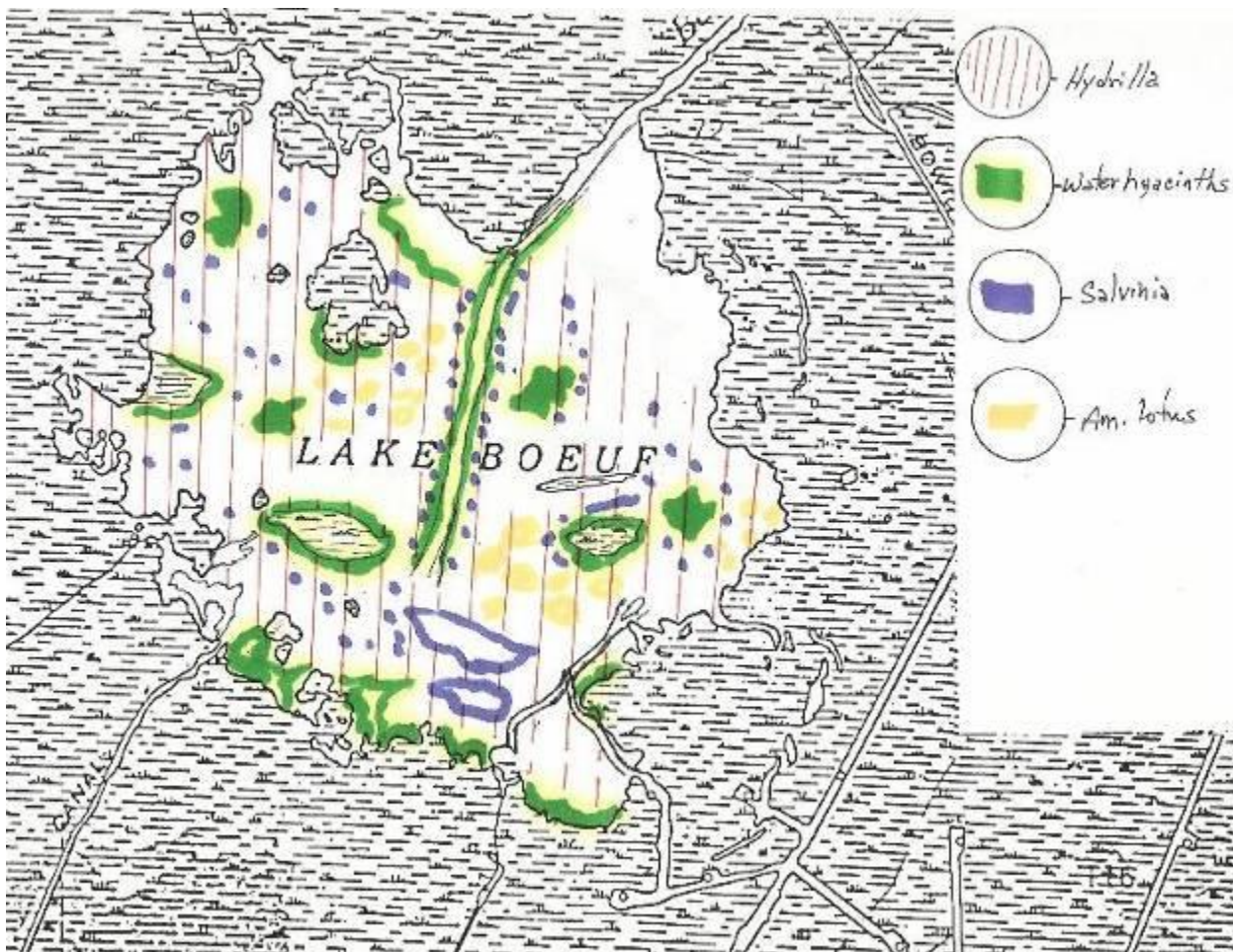
LAKE BOEUF September 1994

On September 28, 1994, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic plant composition and severity of infestation.

This year, approximately 70-75% of the lake is covered with vegetation. Hydrilla (Hydrilla verticillata) is the dominate plant species present. Water hyacinth (Eichhornia crassipes) was found throughout the lake, especially around floatons, boat lanes and along channels. Salvinia (Salvinia rotundifolia) was also present intermixed within the hydrilla and water hyacinth mats. A few stands of American lotus (Nelumbo lutea) were found. This year there seems to be more floatons present.

Other plants observed were: duckweeds (Lemna spp.), frog's bit (Limnobium spongia), water lettuce (Pistia stratiotes), Eurasian water milfoil (Myriophyllum spicatum), fanwort (Cabomba caroliniana), yellow water-lily (Nymphaea mexicana), fragrant water-lily (Nymphaea odorata), smartweed (Polygonum spp.), sedge (Carex spp.) and Bidens (Bidens spp.).

Surveyed by: Charles Biggar



LAKE BOEUF

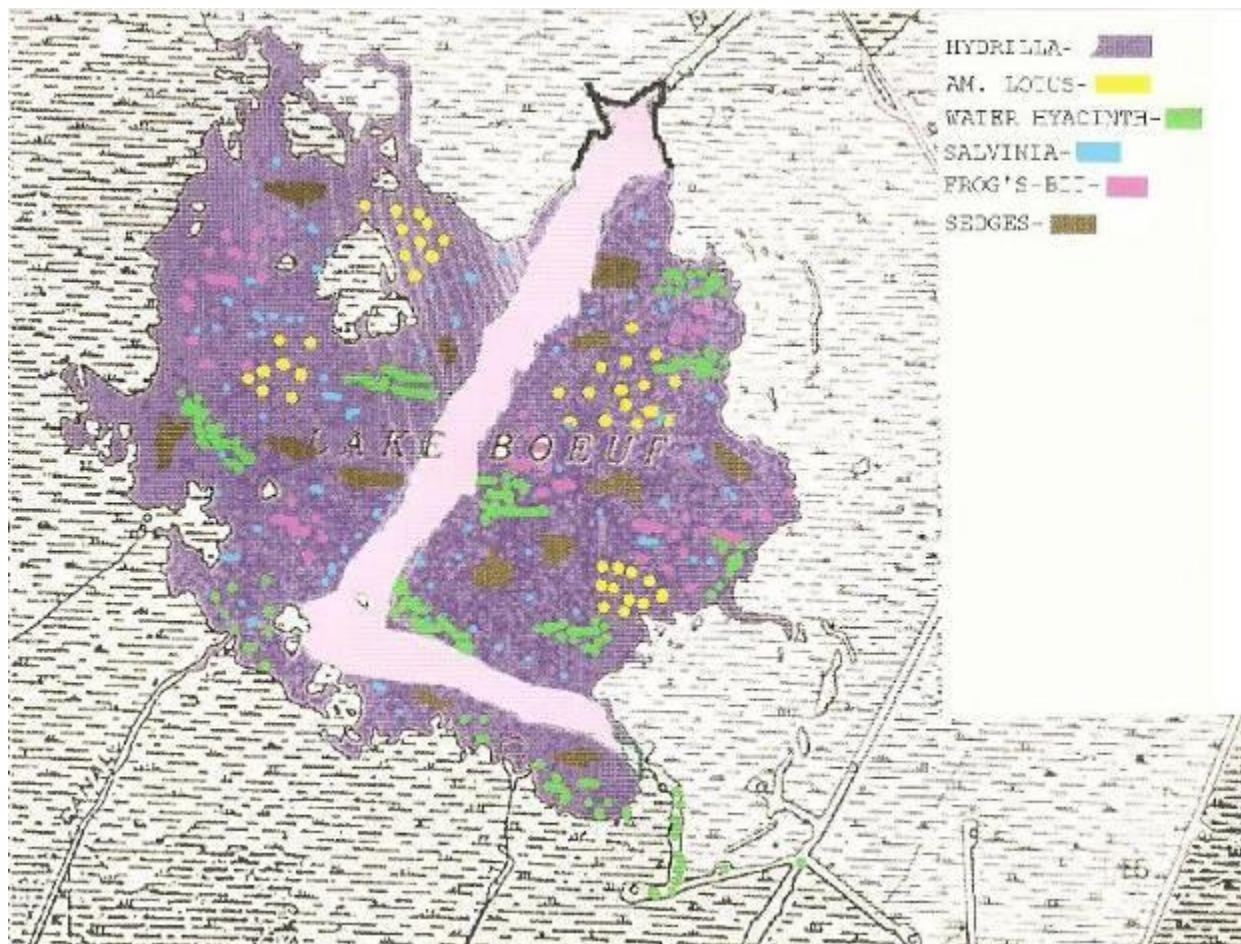
November 1995

On November 16, 1995, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic plant composition and severity of infestation.

The lake was approximately 70-75% covered with vegetation. Hydrilla (Hydrilla verticillata) was the most predominant plant present covering most of the lake. Water hyacinth (Eichhornia crassipes) was found along the edges and floating in mats throughout the lake. This year, a number of floating sedge (Carex spp.) mats were noted. Salvinia (Salvinia rotundifolia) and frog's-bit (Limnobium spongia) was observed intermingled within the hydrilla beds. There were a few American lotus (Nelumbo lutea) stands present.

Other plants observed were: duckweeds (Lemna spp.), water lettuce (Pistia stratiotes), Eurasian water milfoil (Myriophyllum spicatum), fanwort (Cabomba caroliniana), yellow water-lily (Nymphaea mexicana), fragrant water-lily (Nymphaea odorata), smartweed (Polygonum spp.) and Bidens (Bidens spp.).

Surveyed by: Charles Biggar



LAKE BOEUF September 1996

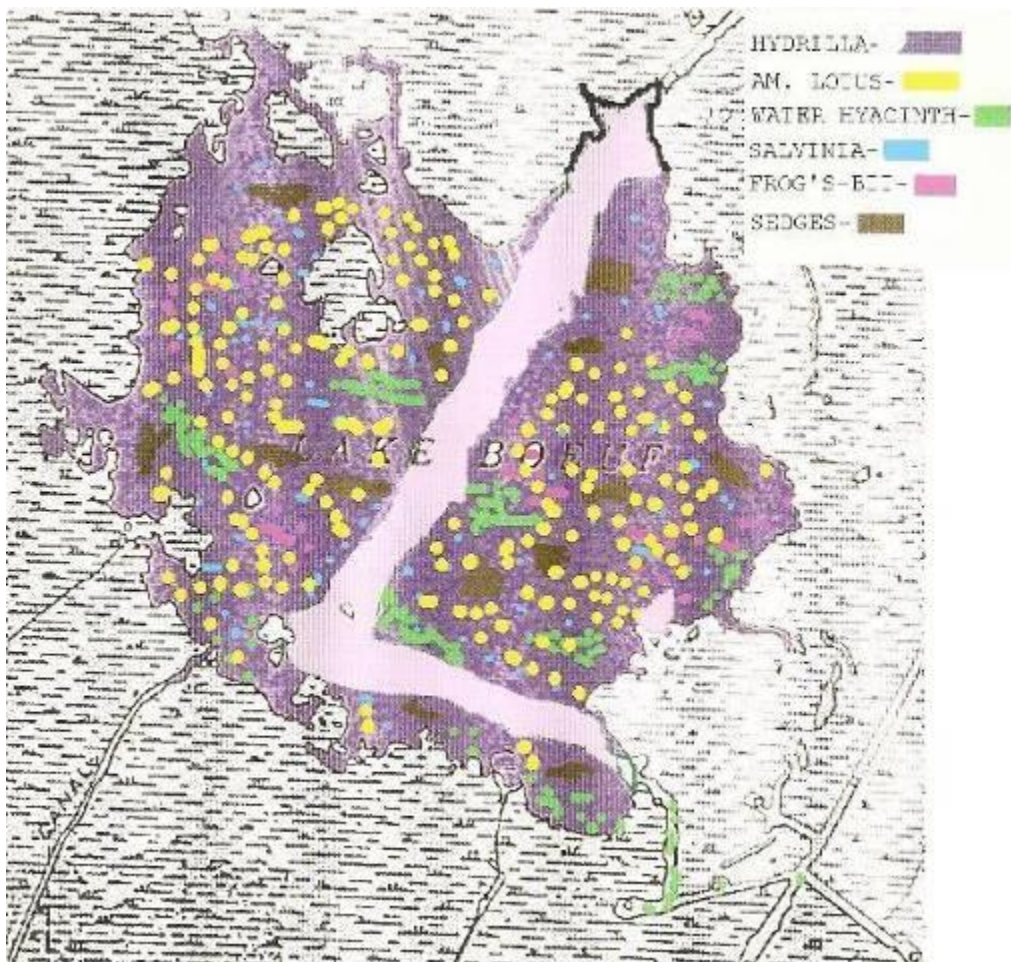
On September 16, 1996, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic plant composition and severity of infestation.

The lake was approximately 65-70% covered with vegetation. Hydrilla (Hydrilla verticillata) was the most predominant plant present covering most of the lake. Water hyacinth (Eichhornia crassipes) was found along the edges and floating in mats throughout the lake. This year, a number of floating sedge (Carex spp.) mats were noted. Salvinia (Salvinia rotundifolia) and frog's-bit (Limnobium spongia) was observed intermingled within the hydrilla beds. American lotus (Nelumbo lutea) was found very abundant throughout the lake.

Other plants observed were: duckweeds (Lemna spp.), water lettuce (Pistia stratiotes), Eurasian water milfoil (Myriophyllum spicatum), fanwort (Cabomba caroliniana), yellow water-lily (Nymphaea mexicana), fragrant water-lily (Nymphaea odorata), smartweed (Polygonum spp.), Bidens (Bidens spp.) and algae.

Note: The area (50 acres) treated with SONAR on May 14, 1996 was void of hydrilla.

Surveyed by: Charles Biggar



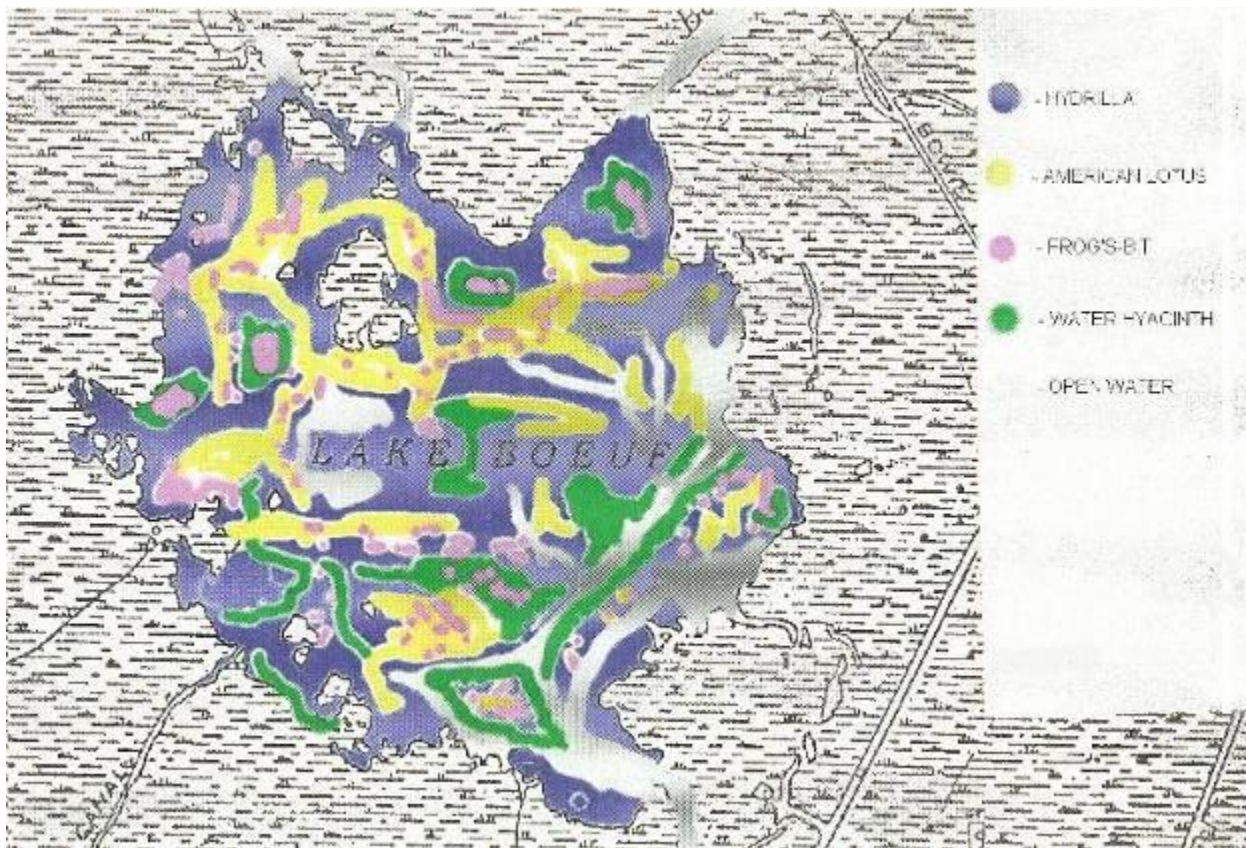
LAKE BOEUF October 1997

On October 7, 1997, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic plant composition and severity of infestation.

The lake was approximately 65-70% covered with vegetation. Hydrilla (Hydrilla verticillata) was the most predominant plant present covering most of the lake. Water hyacinth (Eichhornia crassipes) was found along the edges and floating in mats throughout the lake. Salvinia (Salvinia rotundifolia) and very large patches of frog's-bit (Limnobium spongia) was observed intermingled within the hydrilla beds. American lotus (Nelumbo lutea) was found very abundant throughout the lake.

Other plants observed were: duckweeds (Lemna ssp.), water lettuce (Pistia stratiotes), Eurasian water milfoil (Myriophyllum spicatum), fanwort (Cabomba caroliniana), yellow water-lily (Nymphaea mexicana), fragrant water-lily (Nymphaea odorata), smartweed (Polygonum ssp.), Bidens (Bidens ssp.) sedges (Cyperaceae) and algae.

Surveyed by: Charles Biggar



LAKE BOEUF September 1998

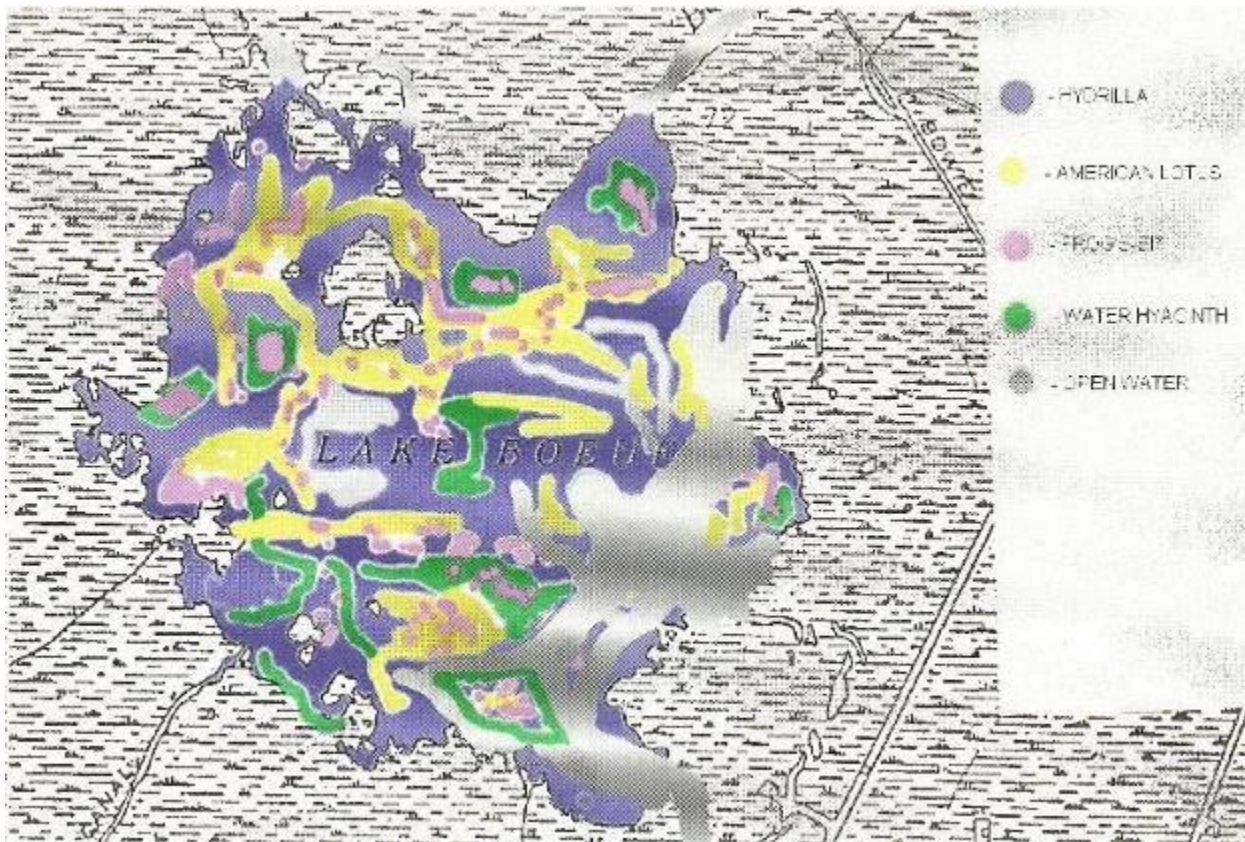
On September 22, 1998, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic plant composition and severity of infestation.

The lake was approximately 65-70% covered with vegetation. Hydrilla (Hydrilla verticillata) was the most predominant plant present covering most of the lake. Water hyacinth (Eichhornia crassipes) was found along the edges and floating in mats throughout the lake. This year, a number of floating sedge (Carex spp.) mats ere noted. Salvinia (Salvinia rotundifolia) and frog's-bit (Limnobium spongia) was observed intermingled within the hydrilla beds. American lotus (Nelumbo lutea) was found very abundant throughout the lake.

Other plants observed were: duckweeds (Lemna spp.), water lettuce (Pistia stratiotes), Eurasian water milfoil (Myriophyllum spicatum), fanwort (Cabomba caroliniana), yellow water-lily (Nymphaea mexicana), fragrant water-lily (Nymphaea odorata), smartweed (Polygonum spp.), Bidens (Bidens spp.) and algae.

Note: Those areas treated with SONAR on May 14, 1996 and May 8, 1998 were void of hydrilla.

Surveyed by: Karl Mapes



LAKE BOEUF September 1999

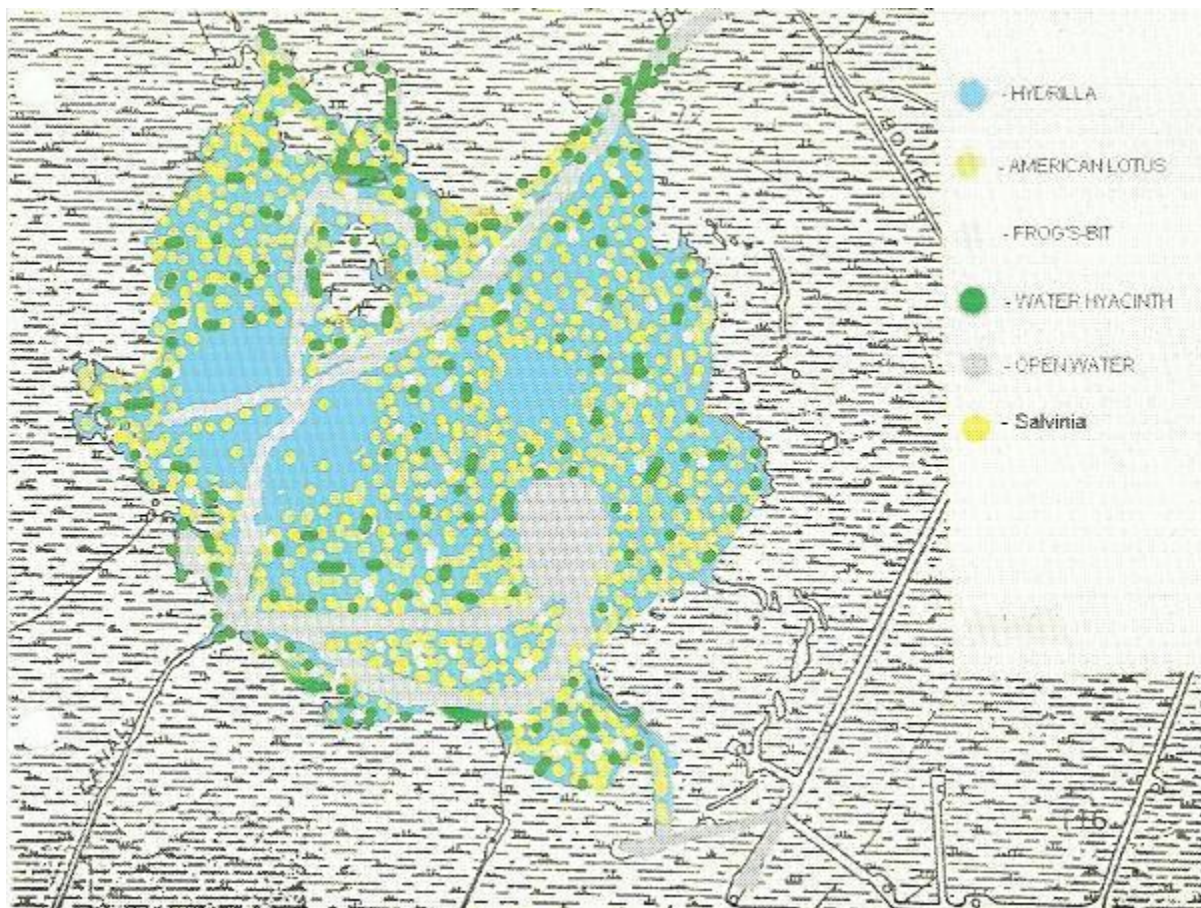
On September 10, 1999, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic plant composition and severity of infestation.

The lake was approximately 70-80% covered with vegetation. Hydrilla (Hydrilla verticillata) was the most predominant submergent plant covering most of the lake. American lotus (Nelumbo lutea) was the most abundant floating plant found throughout the lake. Water hyacinth (Eichhornia crassipes) was found along the edges and floating in mats throughout the lake. This year as in the past, a number of floating sedge (Carex spp.) mats are noted. Salvinia (Salvinia rotundifolia) and frog's-bit (Limnobium spongia) was observed intermingled within the American lotus and hydrilla beds.

Other plants observed were: duckweeds (Lemna spp.), water lettuce (Pistia stratiotes), Eurasian water milfoil (Myriophyllum spicatum), fanwort (Cabomba caroliniana), yellow water-lily (Nymphaea mexicana), fragrant water-lily (Nymphaea odorata), smartweed (Polygonum spp.), Bidens (Bidens spp.) and algae.

Note: Those areas treated with SONAR on May 8, 1998 were beginning to show evidence of hydrilla.

Surveyed by: Karl Mapes



LAKE BOEUF

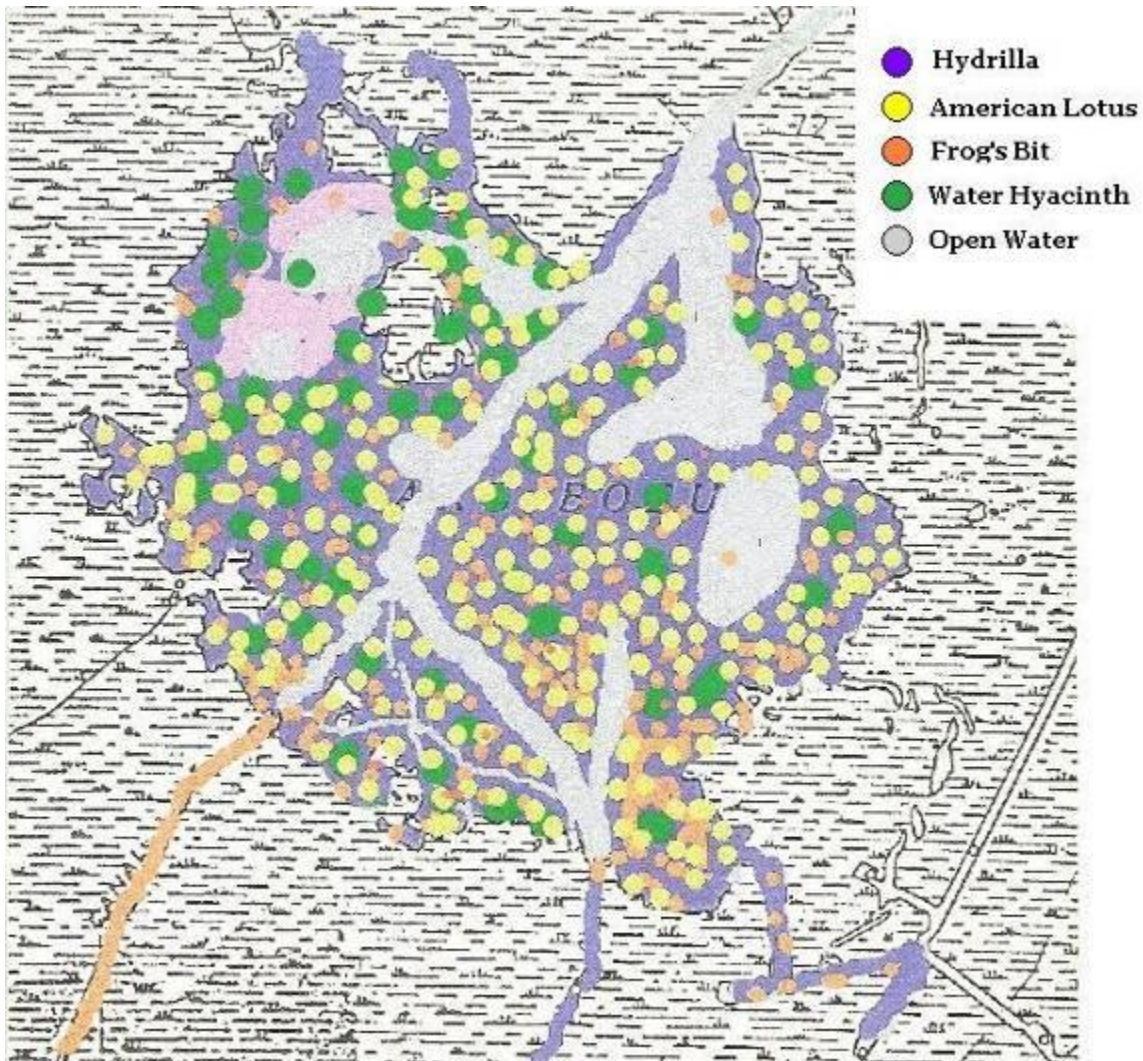
August 2000

On August 30, 2000, Lake Boeuf, Lafourche Parish, was surveyed to determine aquatic plant composition and densities.

Hydrilla (*Hydrilla verticillata*) and American lotus (*Nelumbo lutea*) were the most predominant plants covering most of the lake. Water hyacinth (*Eichhornia crassipes*) was the next most abundant species found along the edges and in floating mats throughout the lake. Frog-bit (*Limnobium spongia*), pennywort (*Hydrocotyle umbellata*), common salvinia (*Salvinia rotundifolia*) and common arrowhead (*Sagittaria latifolia*) was observed in the northwest corner of the lake in greater frequency. Greater densities of salvinia were observed in the south and southeast quadrants of the lake. Water hyacinth was more abundant in the northwest quadrant of the system.

Other plants observed were duckweeds (*Lemna spp.*), water lettuce (*Pistia stratiotes*), fanwort (*Cabomba caroliniana*), yellow water-lily (*Nymphaea mexicana*), smartweed (*Polygonum spp.*), Bidens (*Bidens spp.*), water primrose (*Ludwigia octovalvis*), sedge (*Carex spp.*) and algae.

Surveyed by: Karl Mapes



LAKE BOEUF AUGUST 22, 2001

Assisted by Keith Matherne Lake Boeuf was type mapped and the following predominate species were found:

Water Hyacinth
Hydrilla
Yellow Water Lily

Other species found were coontail scattered throughout the system in small stands. Common salvinia could be found in small numbers and sparsely located except at the southern end of the lake near the Theriot canal where it was at its greatest density. Duckweed could be found throughout the hydrilla and was found in greater densities at the northern end of the lake. Floatons of various sizes could be found in large numbers throughout Lake Boeuf. Within these were found the sedges, pennywort, alligator-weed, arrow arum, and maple trees to just name a few. Water lettuce could be found on the fringes of the lake as well as frog's bit and American lotus.

The large stand of American lotus found last year must have been impacted negatively by the unusually high salinities brought on by the drought. Lake Boeuf is coming back with a strong stand of hydrilla right now.

Lake Boeuf depths were recorded and the mean depth on this date was found to be 2.7'.

Karl Mapes, Biologist Supervisor
Region III

